# IRTS Radio News Bulletin Sunday November 28th 2021

#### **Truskmore Back On Air**

Dave, Ei5IMB reports that the Donegal Amateur Radio Club, EI1DRC are happy to announce that the long-time offline but very well-known Truskmore 2m FM Analogue Repeater, EI2TKR has been rebuilt and resurrected in the form of a TAIT TB8100. It is currently active on-test beside the QTH of its new Keeper, Dave, EI5IMB, with an input of 145.100MHz, 77Hz tone, and an output of 145.700MHz. The temporary location allows ease of access to test and tweak the repeater until January, when it is planned to move it back to its rightful home on the mountain. We would invite all operators and SWL in range to give it a go and send a signal report to Dave via email at irishhamradio /at/ gmail.com

#### **East Leinster Amateur Radio Club**

Tom, EI5IEB informs us that the club continues to meet twice a week via zoom. The club also meets in person weekly, when government guidelines allow, to set up and operate portable field stations. Members are routinely calling into both the 2m and 80m news while operating portable. These in-person meetups also facilitate the testing of new and homebrew equipment, tuning homebrew antennas while having fun in a sample field station scenario. The Club continues to broadcast the monthly IRTS news on 4m and has built up a steady stream of regular callers and SWL's. The next broadcast will be next Sunday, December 5th at 1000 local time. We look forward to receiving signal reports from both SWL's licenced amateurs, and new members are always welcome.

### **South Eastern Amateur Radio Group**

The November meeting of The South Eastern Amateur Radio Group which was due to be held, tomorrow night Monday the 29th of November at 8:00 p.m. at The Sweep Bar, Adamstown, Kilmeaden, Co. Waterford has been cancelled. Due to Covid and high numbers of new cases been confirmed in the past few days it would not be safe to have the meeting. Member's safety and the safety of the public must be foremost in the interests of the club. Hopefully there will be brighter days ahead soon for all of us and we will all get to meet in person. Thanks to all of you for your understanding.

The 89th Irish Radio Transmitters AGM weekend will take place over the weekend of the 9th and 10th of April 2022 in the Woodford Dolmen Hotel, Kilkenny Road, Carlow. Tickets for the Gala Dinner can now be pre-booked from John EI7IG for collection on arrival at the event. Tickets cost €35 and more information including contact details for John can be found on the IRTS Gala Dinner section on <a href="https://www.irtsagm2022cw.blogspot.com">www.irtsagm2022cw.blogspot.com</a>

For anyone that wishes to find out more about the South Eastern Amateur Radio Group and their activities you can drop them an email to southeasternarg /at/gmail.com or please feel free to go along to any of their meetings. You can check their website <a href="www.searg.ie">www.searg.ie</a> and you can also join them on Facebook and follow them on Twitter.

#### **December YOTA Month**

Niall, Ei6HIB reports that the 1st of December marks the start of December YOTA month. This month-long event is all about getting young people involved in our wonderful hobby. EI0YOTA is one of the many YOTA callsigns taking part, and will be active throughout the month on a variety of modes and bands. The EI0YOTA operators are looking forward to a busy month. The entire month of December several youngsters will become active with YOTA as suffix in the callsign. The idea for this is to show the amateur radio hobby to youth and to encourage youngsters to be active on the ham radio waves. For more information on the activity and the awards available see <a href="www.events.ham-yota.com">www.events.ham-yota.com</a>, 45 stations with the YOTA callsign from all continents have already registered.

# **Dwingeloo Radio Telescope**

A collaboration of Members of the CAMRAS Foundation, ESA, Lacuna Space, and Jan, PA3FXB have sent the Observatory's callsign PI9CAM on a round trip of 730,360km to the Moon and back. This is hardly anything new, as this telescope was commissioned in 1956, played an important role in the early exploration of the structure of the Milky Way using 21 cm hydrogen radiation, and also has a long history of amateur radio experiments. It's often used for Moonbounce, but this was the first time a data message was bounced using a small RF chip. An off-the-shelf Semtech LR1110 RF transceiver chip was hooked up to a 350 Watt amplifier, in turn feeding the obveratory's 25-metre dish. The same dish and chip was used to receive the signal on its return from the Moon 2.44 seconds later. The short data format of LoRa messages allowed for the amplifier to be bypassed in time to receive the echo with the same chip. The LR1110 chip was also used to measured the round trip time of

the message, as well as the frequency offset due to Doppler shift caused by the relative motion of the Earth and the Moon. Calculating the distance to the moon from the round trip time and comparing this with the theoretical position effectively created a radar image of the surface. This impressive demonstration shows the power of LoRa with its low bandwidth, usually low power, low cost and its small size.

# **Shortwave & Contesting**

High power AM transmitters are not easily sourced now, but Radio Caroline got lucky, finding a Harris DX25. They are now back on the air on 648 kHz, transmitting from Orfordness with over 4 KW and a 100 meter tall tower. First reception reports indicate a much improved signal across the British Isles. Station manager Peter Moore is asking listeners to leave an SWL report, using the form provided on their website www.radiocaroline.co.uk

The following three International Short Wave League Club club callsigns will be used throughout the month of December 2021: GX4BJC/A, operated by George, G1IPU, located in Clacton on Sea, Essex. MX1SWL/A, operated by Merv, G0UJD, located in Skegby, Nottinghamshire. QSL to those two callsigns via via Dick, M5DIK. And GB75ISWL is operated by Herbie, G6XOU, from Walton on the Naze, Essex. QSL via G6XOU.

The 2021 QRP-ARCI Top Band Sprint takes place from 0000Z to 0300Z on the 2nd of December. The scoring is favourable for very low power stations, dropping output from 10 Watts to 100 miliWatts on SSB twenty-folds the score. Even if You are not a contester or using more than 10 Watts on HF, have a listen at the lower band edge around 1810 kHz, SSB activity is centred around 1910 kHz.

Shortly after, another topband contest coming up is the ARRL 160m CW Contest. The objective is to work US American and Canadian stations from Friday 3rd, starting 2200 UTC, until Sunday 5th, at 1559 UTC.

Henning Andresen OZ2I, the Contest Manager of the Danish EDR, was invited by Gerard, Ei5KF, to operate from his well equipped station in Mitchelstown during this weekend's CQ WorldWide CW Contest. Henning used the temporary callsign EI7EE, and hopefully he can still be worked after the contest.

Also staying on a little longer is Rafal, SQ9CNN, on air as JW5E from the Longyearbyen club station on Spitzbergen, IOTA EU-026. Rafal will be active until late Monday as JW/SQ9CNN.

A chance to work Lichtenstein, possibly after this weekend, is with operators Silvio,

HB9LCW, Haaf, PA3FGA, and Claudia, PA5CT and Aurelio, PC5A. They are HB0A during the current CQWW DX CW Contest.

Another rare prefix in Europe is OI. Military radio amateurs will celebrate Finland's Independence Day on amateur radio frequencies next Monday, the 6th of December. There is an award certificate available for working ten different OI stations. More info at www.sral.fi

## **SSTV** from the ISS

Russian cosmonauts on the International Space Station ISS will soon again broadcast SSTV images on 145,800 MHz. The broadcasts are part of the SSTV experiment of the Moscow Aviation Institute. The broadcast schedule is set for Wednesday from 12:10 to 19:10 UTC, and Thursday from 11:40 to 17:20 UTC. Participants can upload images received on the ARISS website gallery.

## **The Propagation Horoscope**

Wednesday noon last, a filament eruption was observed in the Sun's southern hemisphere. A partial halo CME was observed afterwards in LASCO imagery. The main components of this CME just missed Earth, only causing moderate geomagnetic disturbances this weekend. A second, Earth facing filament eruption was observed in the northeast quadrant starting at midnight on Thursday and peaking early on Friday. This one is likely to affect propagation from Monday onwards, but not strong enough to cause deep radio blackouts. NOAA predicts a Kp index of 4, the X-ray flux is around flare class B, the proton flux is at R0, the solar wind is at 350 km per second, and proton density is at 5 particles per cubic centimeter, but expect those values to rise Monday morning. The MUF for a 3000 km hop reached 21 MHz on most days, occasionaly reaching 30 Mhz around noon. Watch for long path opening into the pacific regions on 20 meters, just after sunrise.

That is the news for this week. Items for inclusion in next week's radio news can be submitted by email to newsteam/at/irts/dot/ie for automatic forwarding to both the radio and printed news services. The deadline is midnight on Thursday

[C]